

## B. Claims

The following is a complete listing of the claims, and replaces all earlier versions and listings.

1-13. (Cancelled)

14. (Currently Amended) A manufacturing method of a thermoelectric conversion material comprising the steps of:

providing a structure in which a plurality of columns of a column-forming material containing aluminum are distributed in a matrix containing silicon, germanium, or silicon germanium that is eutectic with aluminum by sputtering;

removing the column-forming material to form a porous body; and

introducing a semiconductor material into pores of the porous body.

15. (Original) The manufacturing method according to claim 14, comprising a step of chemically treating the porous body after the removal step.

16. (Previously Presented) The manufacturing method according to claim 15, wherein chemical treatment is an oxidation treatment.

17. (Original) The manufacturing method of thermoelectric conversion material according to any one of claim 14 to 16, wherein the introduction step of the

semiconductor is electrodeposition.

18. (Withdrawn) A structure comprising a plurality of columns of a column-forming material and a matrix surrounding the columns, wherein the columns have a Seebeck coefficient at a room temperature larger than that of the material in bulk solid.

19. (Withdrawn) The structure according to claim 18 wherein the columns are placed on a substrate, and substantially perpendicular to a surface of the substrate.

20. (Withdrawn) A thermoelectricity conversion device comprising on a substrate, a structure which comprises columns of a column-forming material and a matrix surrounding the columns, wherein the columns have a Seebeck coefficient larger than that of the material in a bulk solid at room temperature, and the columns are electrically connected to electrodes; and the device generates current flow in response to thermal change of outside.